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7 BEFORE THE HEARING EXAMINER
CITY OF SEATTLE

8 In the Matter of the Appeal of:

) Hearing Examiner File:

9) MUP-12-016(W)

10 BRUCE STRUTHERS

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11 from a SEPA decision issued by the Director,
12 Department of Planning and Development

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14 I, GREG STEVENS, do hereby declare:

- 15 1. I am a Senior Civil Engineer in the Seattle Public Utilities (SPU) Project
16 Management and Engineering Division and am the project manager for the
17 Meadowbrook Pond Detention Facility Dredging and Improvements Project (the
18 "Project"). I make this declaration based on personal knowledge
- 19 2. Attached hereto as Exhibit A is a true and correct copy of the SEPA Environmental
20 Checklist for the Project, dated February 29, 2012.
- 21 3. Attached hereto as Exhibit B is a true and correct copy of the DNS for the Project issued
22 March 8, 2012.
- 23 4. Attached hereto as Exhibit C is a true and correct copy of a letter from Sue Tanner to

DECLARATION OF GREG STEVENS - 1

Peter S. Holmes
Seattle City Attorney
600 Fourth Avenue, 4th Floor
P.O. Box 94769
Seattle, WA 98124-4769
(206) 684-8200

1 Bruce Struthers dated April 3, 2012, a copy of which was sent to Betty Meyer at SPU.

- 2 5. Attached hereto as Exhibit D is a true and correct copy of the Exemption from City of
3 Seattle Environmentally Critical Areas Provisions for the Meadowbrook Pond Detention
4 Facility Dredging and Improvements Project, dated April 2, 2012.
- 5 6. The "Confluence Project," another SPU project that is proposed to be developed
6 following the Project, calls for replacing the culvert for the south branch of Thornton
7 Creek under 35th Avenue NE and reconstructing the north and south branches of
8 Thornton Creek along with its associated floodplain area (including planting riparian
9 and floodplain areas with native trees and shrubs).
- 10 7. SEPA review has not yet been undertaken for the "Confluence Project."
- 11 8. The Project is not dependent on the "Confluence Project" for the Project's completion or
12 successful operation. The Project can and would proceed whether or not the
13 "Confluence Project" is ever constructed.

14 I declare under penalty of perjury under the laws of the State of Washington that the
15 foregoing is true and correct.

16 Executed this 14 day of August, 2012, at Seattle, Washington.

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19 GREG STEVENS
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EXHIBIT A

**SEATTLE PUBLIC UTILITIES
SEPA ENVIRONMENTAL CHECKLIST**

A. BACKGROUND

A1. Name of proposed project:

Meadowbrook Pond Detention Facility Dredging and Improvements Project

A2. Name of applicant:

Seattle Public Utilities (SPU)

A3. Address and phone number of applicant and contact person:

Greg Stevens, Project Manager
Seattle Public Utilities
Project Delivery Branch
Seattle Municipal Tower, Suite 4900
PO Box 34018
Seattle, WA 98124-4018
206-615-1451

A4. Date checklist prepared:

February 29, 2012

A5. Agency requesting checklist:

Seattle Public Utilities (SPU)

A6. Proposed timing or schedule (including phasing, if applicable):

SPU intends to construct this project during the summer months of 2012, starting perhaps as early as June 1, 2012, as logistics and various approvals allow. Project construction is estimated to take less than 80 work days.

A7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

SPU is proposing to construct a habitat improvement project called the Thornton Creek Confluence Project on City-owned parcels and future vacated City of Seattle right-of-way immediately west of and adjacent to this Meadowbrook Pond Dredging and Improvements Project. However, the Confluence Project is separate from and not interdependent with the Meadowbrook Pond Dredging and Improvements Project.

A8. List any environmental information you know about that has been prepared, or would be prepared, directly related to this proposal.

HWA GeoSciences, Inc. June 23, 2003. Sediment Sampling Meadowbrook Pond Seattle, Washington. HWA Job No. 2003-040-22.

Resource Planning Associates, Miramar Group, and Taylor Associates. August 12, 2005. Meadowbrook Pond: A study of water circulation and its possible effects on stormwater treatment and water quality.

Horner, Richard and Taylor Associates. October, 2008. Meadowbrook Pond: Assessment of maintenance and performance, and proposed action plan.

Booth, Derek. 2008. Meadowbrook Pond conceptual analysis for sediment-related issues. Technical memorandum.

Eastberg, Cheryl (City of Seattle Department of Parks and Recreation). No date. Checklist of Meadowbrook Pond bird species.

Northwest Archaeological Associates (NWAA). May 2011. Cultural resources assessment for the Thornton Creek Confluence Project, King County, Washington. [Note: This report assessed cultural resources for both projects: the Thornton Creek Confluence Project and the Meadowbrook Pond Detention Facility Dredging and Improvements Project.]

Seattle Public Utilities. 2010. Seattle Biological Evaluation.

Symbiosis Tree Care. 2011. Hazard and exceptional tree evaluation.

Jacobs, Dave (SPU Separated Systems Modeling and Monitoring Lead). December 13, 2011. Results of modeling for Meadowbrook Pond expansion. Email to Greg Stevens (SPU Project Manager).

While not directly related to this project, the following information developed for the nearby Thornton Creek Confluence Project was of use in informing the environmental analysis for the Meadowbrook Pond Detention Facility Dredging and Improvements Project.

Natural Systems Design. June 2011. Basis of Design, Thornton Creek Confluence Project.

Chapin, David. June 2011. Thornton Creek Confluence Project jurisdictional wetland Identification and delineation report. Seattle Public Utilities.

Aspect Consulting. June 2011. Thornton Confluence geotechnical report.

SPU Materials Laboratory. January 2010. Geotechnical data report, 35th Avenue Northeast culvert replacement.

A9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

There are no known applications pending for governmental approvals or other proposals directly affecting the properties covered by this proposal.

A10. List any government approvals or permits that would be needed for your proposal, if known.

Implementation of this project may require some or all of the following permits and approvals:

- Master Use Permit—City of Seattle, Department of Planning and Development (DPD) (including possible Seattle Design Commission review and possible formal approval by City Council, as applicable).
- Grading Permit— City of Seattle, DPD
- Tree Protection Ordinance compliance— City of Seattle, DPD
- Environmentally Critical Areas compliance—City of Seattle, SPU
- Street Use Permit—City of Seattle, Department of Transportation (SDOT)
- Clean Water Act Section 401 Water Quality Certification—Washington Department of Ecology [linked to Clean Water Act Section 404 Permit]
- Hydraulic Project Approval—Washington Department of Fish and Wildlife (WDFW)
- Construction Stormwater General Permit—Washington Department of Ecology
- Clean Water Act (CWA) Section 404 Nationwide Permit—US Army Corps of Engineers [In 2007, the US Army Corps of Engineers (Corps) determined (valid for 5 years) that Cells 1, 2, and 3 of Meadowbrook Pond are not Waters of the US and excavation, dredging or other maintenance work in these areas would not need a Clean Water Act Section 404 permit. However, the Corps determined that the forebay to Meadowbrook Pond is within the banks of Thornton Creek, which is a Water of the US, and activities in the forebay involving excavation, dredging, or alteration of the stream channel would require a Section 404 permit.]
- National Historic and Preservation Act Section 106 compliance—Washington State Department of Archaeological and Historic Preservation [linked to CWA Section 404 Permit]
- Endangered Species Act (ESA) compliance—US Fish and Wildlife Service and/or National Marine Fisheries Service [linked to CWA Section 404 Permit]
- Magnuson-Stevens Fishery Conservation and Management Act compliance (Salmon Essential Fish Habitat)— National Marine Fisheries Service [linked to CWA Section 404 Permit]

A11. Give a brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

This project would dredge accumulated sediment in all areas of Meadowbrook Pond (Pond) as it exists now, enlarge the Pond, improve trash removal at the inlet to the high flow bypass pipe, improve employee access and safety, and improve Pond habitat. The project would not alter any flow control features affecting Thornton Creek or the Pond, including the high flow bypass pipe inlet, the Pond entrance dike, the Pond outlet weir, or the overflow pipe to the high flow bypass

pipe.

The Meadowbrook Pond Facility (Facility) is a 10.5 acre constructed stormwater management facility in northeast Seattle, located immediately downstream of the confluence of the north and south branches of Thornton Creek. It contains the 2.0 to 2.5 acre (depending on water levels) detention Pond that captures some of the stormwater runoff from about 6,840 acres of the upstream watershed, nearly 90 percent of the total drainage area of Thornton Creek. The Facility was fully reconstructed during 1996-1997 from its prior condition as the abandoned Lake City Sewage Treatment Plant.

Even though Thornton Creek flows through the Facility, the Pond itself is "off-line" from Thornton Creek except during high flows (i.e., during and following storm events). During dry periods, water in the Creek flows into the Facility, through the forebay trash rack and the forebay, and over the Pond diversion dam before continuing downstream in the Creek (i.e., without flowing into the Pond). When it rains and the water level in the forebay increases, a portion of the water flows from the forebay into the Pond through a 100-foot long entrance dike. (During periods of high flow, water from the Creek may also flow through a high flow bypass pipe inlet, located approximately 200 feet upstream of the forebay trash rack, and into a 72-inch diameter high flow bypass pipe. The high flow bypass pipe transitions to a 90-inch diameter pipe approximately 1900 feet east of the Pond. The 90-inch diameter pipe continues easterly for approximately 1500 feet to a concrete structure on Riviera Pl NE. Flows then exit this structure through two pipes [42-inch and 48-inch diameters]. into Lake Washington.) Once water enters the Pond, it flows through Pond Cells 1, 2, and 3 before flowing through the Pond outlet weir and back into Thornton Creek. During high flows, a portion of the water flowing from Cell 2 to Cell 3 enters the high flow bypass pipe via an overflow pipe in the Pond.

The Pond collects and detains stormwater in order to reduce downstream flooding, streambed scouring, and deposition of sediments in Lake Washington at the mouth of the Creek. To achieve these goals, the Pond includes both live capacity and dead capacity. *Live capacity* is that part of the Pond that is above the Pond outlet elevation and that can be evacuated by gravity. In this case, live capacity functions to reduce downstream flooding. *Dead capacity* is that part of the Pond capacity that is below the outlet elevation and that cannot be evacuated by gravity. The Pond's dead capacity is generally 3 to 5 feet in depth. The dead capacity allows sediments to settle, which improves water quality in Thornton Creek, reduces deposition of sediments at the mouth of the Creek, and creates habitat for fish in the Pond when the water level is low. The volume of water in the Pond ranges from about 350,000 cubic feet during dry summer months (a portion of the dead capacity) to about 650,000 cubic feet during the most extreme storm events (representing the total reservoir capacity—that is, both live and dead capacities).

The Pond was completed in 1997 and has been dredged in full only once (2001) since that time. Measurements indicate the Pond has lost significant storage volumes for sediment and flows due to sediment accumulation, which affects the Facility's ability to function as intended. In addition, over the past 12 years of operation, SPU has been evaluating the operational and use characteristics of the Facility. As a result, SPU is now proposing in this project to construct improvements intended to increase the volume of the Pond (both live and dead capacities, to reduce local and downstream flooding impacts and improve water quality), reduce operational costs, enhance safety for operations personnel, and enhance the Pond's fish and wildlife habitat. The Pond expansion is intended to increase the Pond's sediment-trapping capacity and efficiency, and to alleviate the occasional flooding that occurs in the surrounding neighborhood and downstream areas. The expansion is also expected to improve water quality in the Pond

(particularly related to summer temperatures and nutrients).

A vicinity map is included as Attachment A. Attachment B depicts the general layout of the Facility. Attachment C shows the following proposed project elements.

Forebay and Forebay Trash Rack

- Dredge the forebay to its original sediment storage design specifications (thereby dredging an estimated 2,000 cubic yards from the forebay);
- Construct two new service roads to the forebay by excavating 600 cubic yards to improve service vehicle access;
- Modify the existing trash rack to improve employee safety by demolishing the existing stairway and concrete platform, installing a new service walkway, and installing a new concrete pedestal to create access to the new walkway.

Meadowbrook Pond

- Dredge all three cells of the Pond to their original sediment storage design specifications (thereby dredging an estimated 7,700 cubic yards from Meadowbrook Pond);
- Expand the Pond volume by approximately 10 percent by excavating approximately 10,000 cubic yards from the northwest corner of the Facility, constructing a service road into this new lobe, and constructing a flood control berm (north berm) along the north perimeter of the Pond. The existing entrance kiosk and the dogwood trees comprising Annie's Memorial tree grove would be relocated to other locations on the project parcel;
- Install permanent sediment depth gages in all Pond cells;
- Improve habitat conditions in the Pond by planting native vegetation around the perimeters of the Pond and islands;
- Improve habitat conditions in the Pond by installing five floating habitat islands.

High Flow Bypass and Inlet Structure Trash Rack

- Add a second trash rack, a new concrete slab and two walls to accommodate the new trash rack, a new service walkway, and a new service ladder. This new trash rack will contain safety railings and a walkway to better allow workers to safely remove debris from the creek that gets caught up in this area.
- Modify pedestrian and service vehicle access to the existing bypass trash rack and inlet structure to improve worker safety by widening existing asphalt pathways to 15 feet wide and adding safety features such as railings at the bypass trash rack and inlet structure.

A12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

The project would occur on a single tax parcel (#2726049129; 10.5 acres) owned by SPU. That parcel has several addresses, including 3600 Northeast 105th Street, 10700 36th Avenue Northeast, and 10515 39th Avenue Northeast. The project parcel is located in the heavily developed, residential Meadowbrook neighborhood of northeast Seattle. The project is located in

the southwest quarter of Section 27, Township 26 North, Range 4 East and within the Lake Washington Water Resource Inventory Area (WRIA 8). The GPS location is 47.421952 / 122.171634. A vicinity map is included as Attachment A. Attachment B depicts the general layout of the Facility. Attachment C shows the proposed work elements.

The legal description of the property is:

The South 130 feet of the Southwest 1/4 of the Southwest 1/4, less the West 1/4 and less the East 1/4 thereof, less roads together with the West 1/2 of the East 1/2 of the Northwest 1/4 of said Southwest 1/4 of the Southwest 1/4, less the East 50 feet of the North 280 feet, less the North 155 feet lying West of the East 50 feet, less the street, together with parcels A and B of Seattle Short Plat # 83-443 as recorded in King County records # 8403010618- said short plat described as follows: The East 1/2 of the Southwest 1/4 of the Southwest 1/4 together with the West 1/2 of the Southeast 1/4 of the Southwest 1/4 of the Southwest 1/4 less the South 130 feet thereof, less the street.

B. ENVIRONMENTAL ELEMENTS

B1. Earth

a. General description of the site: [Check the applicable boxes]

- ☒ Flat ☐ Rolling ☐ Hilly ☐ Steep Slopes ☐ Mountainous
☐ Other:

The project location is flat, but has a large, created depressional stormwater detention pond (Meadowbrook Pond). Some slopes steeper than 30 percent exist along Thornton Creek as it runs through the Facility; these slopes are generally less than 15 feet in elevation. Most slopes are engineered with added woody debris, large rocks, and quarry spall. Some slopes along Thornton Creek are constructed large-rock rockeries covered by vegetation. Portions of the west side of the project parcel also have four to five foot tall mounded earth sculptures separated by pedestrian pathways.

b. What is the steepest slope on the site (approximate percent slope)?

The project location is mostly flat with some constructed berms located throughout the Facility. The project location ranges from a high point of 60 feet along the western portion of the site to a low of 54 feet in the southeast corner of the site (excluding submersed elevations in the Pond). The berms and the banks of the Pond have slopes no greater than 30 percent. Short sections of steep slopes (greater than 30 percent) are associated with Thornton Creek in the vicinity of the forebay.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

Subsurface and surface soil materials on and near the project location can be grouped into five units consisting of asphaltic-concrete pavement, concrete, and artificial fill (from the former Lake City Sewage Treatment Plant or other developments), and recessional glacial outwash and fine-grained recessional glacio-lacustrine (glacial lake) deposits. Portions of the project location may also be underlain by organic soils from former wetland habitats that were filled to develop the site. Essentially the entire parcel has been impacted by cutting, filling, and grading activity over the past 80 years.

- d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe:**

There are no surface indications that indicate past or possible presence of unstable soils.

- e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate the source of fill.**

The project would dredge all of the Pond and portions of Thornton Creek below the ordinary high water mark in the Pond forebay. Expansion of the Pond would require excavating and grading existing upland soil materials. Construction of the north berm would require placement of excavated materials in an existing upland location. Temporary and permanent upland ground disturbance activities would affect less than 1 acre.

Approximately 20,300 cubic yards of soil and sediment would be excavated by this project. The quantity of dredged sediment from the Pond and forebay is estimated to be 9,700 cubic yards. Excavated soil material related to Pond expansion and construction of the two service roads to the Pond forebay is estimated to be 10,600 cubic yards. Approximately 500 cubic yards of this excavated material would be used to construct the north berm. A new concrete slab and asphalt pathways that would be widened or replaced would require a maximum 6 inch subgrade consisting of imported mineral aggregate—estimated to total approximately 330 cubic yards. Aggregate would be provided by a State-licensed purveyor of such materials. The volume of asphalt and concrete to be used for actual surfacing is unknown at this time. Also, up to 100 cubic yards of topsoil, compost, and/or mulch would be imported to support the restoration and landscaping of areas disturbed by construction. This material would be provided by a State-licensed purveyor of compost products and landscape materials.

Portions of some of the mounded earth sculptures would be cut to accommodate widening of the pedestrian pathways for service vehicle access to the overflow pipe diversion structure. The cut portions of those earth sculptures would be faced with new rockery walls to ensure mound stability and improve aesthetics.

- f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe:**

No significant erosion is anticipated during or as a result of the proposed work. The project would implement a Stormwater Pollution Prevention Plan (SWPPP) with standard operating procedures (SOPs) and best management practices (BMPs) appropriate to the site, conditions, and activities. The water elevation in the Pond would be lowered during construction and Thornton Creek would be pumped-and-bypassed around the construction area. Native plants would also be used to restore disturbed areas, where appropriate.

- g. About what percent of the site would be covered with impervious surfaces after project construction (for example, asphalt or buildings)?**

The project parcel (10.5 acres) has an estimated area of existing impervious surface of less than 1 acre (9.5 percent of the parcel). The proposed project would increase the paved width of approximately 550 feet of asphalt pathways by approximately 6 feet. The new concrete slab and walls at the overflow pipe diversion structure would result in

approximately 125 square feet of additional impervious surface. Construction of three new service roads would add approximately 3,550 square feet of asphalt and articulated concrete block surface. Thus, the project is expected to add approximately 7,000 square feet of new impervious surface (1.5 percent of the parcel). The volume of asphalt and concrete to be used for actual surfacing is unknown at this time.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any:

The water elevation in the Pond would be lowered during construction and Thornton Creek would be pumped-and-bypassed around the construction area. To manage stormwater runoff, construction disturbance, and erosion as needed during construction, the project would implement a SWPPP with SOPs and BMPs appropriate to the site, conditions, and activities. Construction work would be monitored, maintained, and adjusted as necessary to meet changing conditions.

B2. Air

a. What types of emissions to the air would result from the proposal [e.g., dust, automobile, odors, industrial wood smoke, greenhouse gases (GHG)] during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Mobile and stationary equipment would be used to construct the proposed project and would generate emissions due to the combustion of gasoline and diesel fuels and grading/excavation activity. Emissions during construction would include normal amounts of exhaust (that is, carbon monoxide, sulfur, and particulates) from construction equipment and dust from grading activities and are expected to be minimal, localized, and temporary.

This project would generate greenhouse gas (GHG) emissions from construction activity. The total GHG emissions for the project are estimated to be 544 metric tons of carbon dioxide emission (MTCO₂e). The GHG emission calculations are shown in Attachment D. One metric ton is equal to 2,205 pounds. GHG emissions generated by from operation and maintenance activity of the Facility are not included in these calculations because this is an existing facility and the proposed project is not expected to substantially alter operation or maintenance activities in terms of their current GHG or other air emissions.

This project would generate approximately 178 MTCO₂e of GHG emissions by adding approximately 3,300 square feet of new concrete (asphalt) walkways, a 125 square foot slab at the overflow pipe diversion structure, and new concrete pedestal at the forebay trash rack. In addition, the project would generate approximately 366 MTCO₂e of GHG emissions during the estimated 80 work days through the operation of diesel- and gasoline-powered equipment and to transport materials, equipment, and workers to and from the site. Because project construction methods were not completely known at the time this checklist was prepared, the estimates provided here are based on daily vehicle operation times for the entire estimated project duration and assuming work occurs over 80 work days; actual times may be less.

b. Are there any off-site sources of emissions or odor that may affect your proposal? If so, generally describe.

There are no known off-site sources of emissions or odor that would affect this proposal.

c. Proposed measures to reduce or control emissions or other impacts to air, if any:

The Puget Sound Clean Air Agency (PSCAA) is responsible for enforcing federal, state, and local air pollution standards and governing air pollutant emissions from new sources in King, Snohomish, Pierce, and Kitsap Counties. As required by PSCAA regulations, emissions would be controlled by using reasonably available control technologies (PSCAA 2008) and City of Seattle SOPs and BMPs for construction. These would include requiring contractors to use best available control technologies, proper vehicle maintenance, and minimizing vehicle and equipment idling. The dredge would likely be equipped with a turbo-charged, after-cooled diesel engine.

B3. Water

a. Surface:

- (1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If so, describe type and provide names. If appropriate, state what stream or river or water body it flows into.**

Thornton Creek is a tributary to Lake Washington. The Facility is located about one stream-mile upstream from the mouth of Thornton Creek as it flows into Lake Washington. The south fork of Thornton Creek confluences with the north fork 130 feet west (upstream) of the project parcel, forming the mainstem Thornton Creek. The mainstem then enters the Facility from the west and consists primarily of an open creek channel approximately 5 feet wide, flowing from west to east. The Creek meets the Pond forebay at the south side of the Pond (see Attachment B).

Narrow bands of wetland habitat are associated with the ordinary high water mark of Thornton Creek. There is one small wetland southwest of the Pond on the project parcel and another small wetland on private property west of the project parcel. Meadowbrook Pond is a constructed stormwater facility and, generally, is not regulated as a wetland under federal or state wetland regulations. The wetlands mentioned above, Meadowbrook Pond, and Thornton Creek are considered Environmentally Critical Areas (Wetlands), as mapped by the City of Seattle DPD.

- (2) Will the project require any work over, in, or adjacent to (within 200 feet) the described waters? If so, please describe, and attach available plans.**

All elements of this project would require work over, below, or adjacent to the ordinary high water mark of Thornton Creek and Meadowbrook Pond. The project would construct a new concrete slab and trash rack on the bed of Thornton Creek at the existing high flow bypass inlet structure, which would require relocation of approximately 10 boulders in the Thornton Creek channel. Also, dredging of the forebay and Pond would be conducted using a combination of vacator trucks, excavators, and a pontoon dredge. Generally, turbidity generated by construction would be prevented from entering Thornton Creek by methods that isolate construction activity from the Creek's channel and flows. The water elevation in the Pond would be lowered during construction and Thornton Creek would be pumped-and-bypassed around the construction area. In addition, a temporary erosion and sedimentation control plan would be prepared and implemented during construction as

part of the SWPPP.

The pontoon dredge requires about 30 inches of water depth to operate and is designed to remove sediment via high-pressure pumps. The dredge would draw sediment slurry into an 8 to 12 inch diameter pipe that conveys the slurry to a dewatering area on the project parcel east and north of the street-end of 36th Avenue Northeast. Dredged sediment discharged from the pipe would enter a series of soil presses that express water. Once pressed, the dredged sediment would be loaded into dump trucks and transported to an approved upland disposal location. Decant water would either be settled in tanks and discharged back into the Pond once it clears of most sediment or discharged directly back to Meadowbrook Pond without settling.

Excavators would be required in areas where the pontoon dredge could not operate or access. Areas requiring excavation would be either completely dewatered or isolated from Thornton Creek to prevent turbidity in Thornton Creek.

Vactor trucks would be required in isolated areas where other equipment could not operate. Process water associated with the vactor truck is taken to existing vactor decant facilities where the vactor waste is dewatered and then transported to an approved facility for disposal.

- (3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands, and indicate the area of the site that would be affected. Indicate the source of fill material.**

Approximately 9,700 cubic yards of dredged material would be removed from the existing Pond and forebay. Approximately 10,600 cubic yards of soil materials would be excavated for the Pond expansion and construction of two new access roads at the Pond forebay. Of the excavated material, approximately 500 cubic yards would be used to construct the berm at the north side of the Pond. The remaining 19,800 cubic yards of dewatered dredged/excavated material would be exported from the project location. The dredged material would be landfilled in a licensed landfill (and not used for other purposes). The excavated material would be disposed of at an approved upland location. No fill would be placed in any surface waters or wetlands except for construction of a new concrete pedestal at the forebay trash rack, a new 125 square foot concrete slab on the bed of Thornton Creek at the high flow bypass pipe inlet structure, and 10 ecology blocks used to anchor the five floating habitat islands.

- (4) Will the proposal require surface water withdrawals or diversions? If so, give general description, purpose, and approximate quantities if known.**

A full-channel bypass on Thornton Creek would be used when dredging the Pond forebay. Base flows in the mainstem of Thornton Creek would not be altered above or below the forebay during the bypass. There may also be several smaller pumps deployed to remove groundwater during construction. The quantities of water to be diverted are unknown.

- (5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.**

Approximately 7.5 acres (71 percent) of the 10.5 acre project parcel lies within the 100-year floodplain of Thornton Creek. The parcel is identified as being in a flood-prone area,

an Environmentally Critical Area as mapped by the City of Seattle DPD (see <http://web1.seattle.gov/dpd/maps/dpdgis.aspx>).

- (6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.**

The project would not produce or discharge waste materials to surface waters. Any turbidity generated by construction would be contained on the project site or redirected back to Meadowbrook Pond where it originated.

b. Ground:

- (1) Will ground water be withdrawn, or would water be discharged to ground water? If so, give general description, purpose, and approximate quantities if known.**

Groundwater is known to occur across the site between elevations 49 to 53, or roughly 5 feet below the existing ground surface. Groundwater levels are expected to fluctuate seasonally with variations in precipitation, changes in site and near-site usage, and water levels in Thornton Creek. Thus, some groundwater may be encountered during the excavation required for expanding the Pond. Dewatering may be required to accommodate construction activities. The quantities of groundwater to be moved during dewatering are unknown.

- (2) Describe waste material that would be discharged into the ground from septic tanks or other sources, if any (e.g., domestic sewage; industrial, containing the following chemicals...; agricultural, etc.). Describe the general size of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.**

The project would not discharge any waste material into the ground. Any turbidity generated by construction would be contained onsite or redirected back to Meadowbrook Pond where it originated. To manage spill prevention of hazardous and waste materials during construction, the project would implement a SWPPP with SOPs and BMPs appropriate to the site, conditions, and activities. Construction work would be monitored and adjusted as necessary to meet changing conditions.

c. Water Runoff (including storm water):

- (1) Describe the source of runoff (including storm water) and method of collection and disposal, if any (include quantities, if known). Where would this water flow? Would this water flow into other waters? If so, describe.**

Currently, stormwater on the project parcel either infiltrates or surface-flows to Thornton Creek or the existing rip-rapped shorelines of Meadowbrook Pond and forebay. In addition, this project is a constructed stormwater detention facility. Stormwater generated from upstream areas of the Thornton Creek watershed currently enters this Facility. The proposed project would not create a need to manage additional stormwater runoff beyond existing conditions and is actually designed to increase stormwater detention capacity in the Thornton Creek watershed. Stormwater runoff may need to be managed during construction to prevent sediment from leaving the site or entering Thornton Creek. To minimize the erosion potential of stormwater runoff during construction, temporary erosion control measures, such as a silt fences

or straw wattles, would be deployed as needed and according to the project's SWPPP. Once construction is complete, temporary erosion control measures would be removed and stormwater flows would follow their pre-construction pathways. SPU anticipates the Pond expansion will lessen the local and downstream flooding impacts and improve water quality in Thornton Creek and Lake Washington. Expansion of Meadowbrook Pond is expected to increase the Pond's current volume (reservoir capacity) by 10 percent and its live capacity by 27 percent.

Because the Pond's live capacity would increase, the amount of water that flows to Lake Washington via the Pond overflow structure and the high flow bypass pipe (rather than via Thornton Creek) would increase slightly. The actual timing, duration, volume, and quality of that discharge are not known. SPU conducted hydraulic modeling to determine the impacts of the proposed changes on the discharge characteristics in the high flow bypass pipe system. Modeling results indicated there would be no increase in peak flow, peak surcharge depth, or peak duration within the high flow bypass pipe during the 25 year storm event. For the 100 year storm event, modeling indicated there would be no increase in peak flow or peak surcharge depth in the high flow bypass pipe. However, modeling for the 100 year storm event indicated the duration of the peak surcharge would increase by approximately 3 minutes (from the existing baseline of 3 hours and 28 minutes) along the length of the high flow bypass pipe from the overflow structure in Meadowbrook Pond downstream to the discharge structure at the pipe's Lake Washington outfall. SPU's conclusion from these modeling results is that the Pond expansion would cause minimal increase in peak flow duration but that this would not reduce the structural reliability of the high flow bypass pipe system because there would be no increase in peak flow or surcharge depth within the pipe.

(2) Could waste materials enter ground or surface waters? If so, generally describe.

This project would not generate waste materials that could enter groundwater or surface waters. Any turbidity generated by construction would be contained on the project site or redirected back to Meadowbrook Pond where it originated.

d. Proposed measures to reduce or control surface, ground, and runoff water impacts, if any:

No surface, ground, or runoff water impacts are anticipated. To minimize the erosion potential of stormwater runoff during construction, temporary erosion control measures, such as a silt fences or straw wattles, would be deployed as needed and according to the project's SWPPP. Construction work would be monitored, maintained, and adjusted as necessary to meet changing conditions.

B4. Plants

a. Types of vegetation found on the site: [check the applicable boxes]

<input checked="" type="checkbox"/> Deciduous trees:	<input checked="" type="checkbox"/> Alder	<input checked="" type="checkbox"/> Maple	<input type="checkbox"/> Aspen	<input checked="" type="checkbox"/> Other: Cottonwood, Dogwood
<input checked="" type="checkbox"/> Evergreen trees:	<input checked="" type="checkbox"/> Fir	<input checked="" type="checkbox"/> Cedar	<input checked="" type="checkbox"/> Pine	<input type="checkbox"/> Other: (identify)
<input checked="" type="checkbox"/> Shrubs				
<input checked="" type="checkbox"/> Grass				

- ☐ Pasture
☐ Crop or grain
☒ Water plants: ☐ water-lily ☐ eelgrass ☒ milfoil ☐ Other:
☐ Other:

b. What kind and amount of vegetation would be removed or altered?

Temporary and permanent ground disturbance activities would affect less than one acre of upland ground. Areas of grass and native plants would be permanently disturbed by construction of two new access roads to the forebay, forebay trash rack improvements, and construction of the proposed maintenance access improvements related to the high flow bypass inlet and trash rack structure. All temporarily disturbed areas would be restored with grass or native plants once construction has been completed.

As shown in Attachment C, Pond expansion would permanently eliminate an area northwest of the Pond currently vegetated primarily by Himalayan blackberry (*Rubus armeniacus*), mown turf, and non-native ornamental trees. Pond expansion would require removal of up to 50 of those trees. Of these, 21 trees are conifers ranging between 6 and 28 inches in diameter at breast height (DBH). The remaining 29 trees are deciduous trees ranging between 6 and 28 inches DBH. The five dogwood (*Cornus florida*) trees comprising Annie's Memorial grove are also located here, but would be transplanted to a location (to be determined) elsewhere on the project parcel. The Pond expansion area would not be replanted because it would be permanently inundated by the Pond once excavated.

c. List threatened or endangered species known to be on or near the site.

According to a review of the Washington Department of Natural Resources (WDNR) Natural Heritage Program's document called "Sections that Contain Natural Heritage Features, Current as of November 4, 2011" (accessed at www.dnr.wa.gov), there are no documented occurrences of sensitive, threatened, or endangered plant species in this Section. No federally-listed endangered or threatened plant species or State-listed sensitive plant species are known to occur within the municipal limits of the City of Seattle. The project location has been intensively disturbed by development and redevelopment over the last 80 years. Portions of the site have been excavated, filled, paved, or occupied by built structures. There is no habitat for threatened or endangered plants.

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

The project would limit plant removal, pruning, and other disturbance to that required for project construction. Construction limits would be clearly and physically delineated by protective construction fencing to prevent unauthorized trespass and collateral damage to nearby vegetation. Native plants would also be used to restore disturbed areas, where and when appropriate. The project would also attempt to relocate approximately 10 trees that are not too big to successfully relocate, including the 5 trees comprising Annie's Memorial grove. Because up to 50 trees may need to be removed, replacement trees may be required by former Mayor Greg Nickels' Executive Order 03-05 (2005; Clerk File #307611) directing City departments to replace every tree removed from City property with two new trees. Native plant species would be used in this case because of the

wildlife habitat the Facility currently provides. Tree protection and replacement would be governed by the Master Use Permit issued for this project by the City of Seattle DPD. The project would also install native plants around the perimeters of the Pond and islands to improve fish and wildlife habitat. Five vegetated floating habitat islands would also be deployed in the Pond to improve habitat for waterfowl, amphibians and other animals. These floating islands will contain cedar branches, brush piles and aquatics plants. Sealed plastic piping will be used for buoyancy and a cable system installed to anchor the island to the bottom of the pond.

B5. Animals

- a. Birds and animals that have been observed on or near the site or are known to be on or near the site: [check the applicable boxes]**

Birds: ☒ Hawk ☒ Heron ☒ Eagle ☒ Songbirds

☐ Other: Ducks and other waterfowl

Mammals: ☐ Deer ☐ Bear ☐ Elk ☒ Beaver

☒ Other: otter, muskrat, bats, raccoon, possum

Fish: ☒ Bass ☒ Salmon ☒ Trout ☐ Herring

☐ Shellfish ☒ Other: perch, peamouth, whitefish, carp (goldfish), stickleback

The project location is more than 3,000 feet west of Lake Washington, which drains to Puget Sound. ESA-listed species for Puget Sound (PS) and Lake Washington are Chinook salmon (*Oncorhynchus tshawytscha*, Threatened PS), steelhead (*O. mykiss*, Threatened PS), and bull trout (*Salvelinus confluentus*, Threatened, PS). Chinook salmon are known to use and breed in Thornton Creek in the vicinity of the Facility and in upstream locations. Coho salmon (*O. kisutch*) is a Candidate species for listing as Threatened and is known to use Thornton Creek near the Facility. In addition to the fish species described above, Thornton Creek is known to be used by coast-resident cutthroat trout (*O. clarki*) and sockeye salmon (*O. nerka*). The Pond is not suitable habitat for salmonid fishes, which tend to avoid the Pond. Fish in the Pond tend to be perch, peamouth, carp, and sticklebacks.

Numerous songbird, waterfowl, and other bird species have been observed at the Facility. A checklist of these species is available from SPU upon request. In addition, beavers routinely use the Pond and build lodges and dens in the Facility.

In 2011, the New Zealand mud snail (*Potamopyrgus antipodarum*) was identified in the lower reaches of Thornton Creek. This invasive, non-native snail has a history of becoming a pest in streams and lakes in many parts of the world. The species has a propensity for very rapid growth through cloning. Populations can grow so large as to consume most of the periphyton on which entire aquatic foodwebs are based. This species is known to have the potential to adversely impact the foodwebs of native salmon, trout, and other fish species and the stream and terrestrial ecosystem processes linked to those foodwebs.

- b. List any threatened or endangered species known to be on or near the site:**

The project location is more than 3,000 feet west of Lake Washington, which drains to Puget Sound. ESA-listed species for Puget Sound (PS) and Lake Washington are Chinook salmon (*Oncorhynchus tshawytscha*, Threatened PS), steelhead (*O. mykiss*, Threatened PS), and bull trout (*Salvelinus confluentus*, Threatened, PS). Chinook salmon

are known to use and breed in Thornton Creek in the vicinity of the Facility and in upstream locations. Steelhead carcasses have been sighted in Thornton Creek. There are no records of bull trout in Thornton Creek. There is no federally designated Critical Habitat on Thornton Creek for any of these species. Coho salmon (*O. kisutch*) is a Candidate species for listing as Threatened and is known to use Thornton Creek near the Facility.

Thornton Creek received State releases of hatchery-reared Chinook salmon on and off between 1977 and 1994, mostly from the University of Washington hatchery in Portage Bay. SPU conducted salmon surveys in Thornton Creek from 1999 through 2008. A total of about 40 Chinook salmon redds were observed during that period. Of these, about one-quarter was located in the mainstem between the confluence and the outlet of Meadowbrook Pond; one-fifth was located in the north branch downstream of a barrier at Northeast 125th Street; one was in the south branch; and the rest occurred in the mainstem downstream of the outlet of Meadowbrook Pond. No information is available on emergent juvenile abundance, but smolt trapping conducted by SPU for a couple of weeks each May between 2000 and 2009 captured small numbers of Chinook smolts each year, with a peak of 309 smolts in 2004.

There have only been two confirmed sighting of adult steelhead in Thornton Creek since 2001. The two sightings were carcasses, found in the mainstem downstream of 45th Avenue Northeast in 2002 and on the north branch in 2004. Adult steelhead may have been observed in Thornton Creek in 1991, 1992, and 1995 but they can be confused with large adfluvial cutthroat trout from Lake Washington that commonly spawn in Thornton Creek in the winter and spring.

WDFW Priority Habitat and Species data (<http://wdfw.wa.gov/mapping/phs/>; June 21, 2011) for the project area indicate Thornton Creek includes "Priority Anadromous Fish Presence" and "Priority Resident Fish Presence." In addition to the fish species described above, Thornton Creek is known to be used by coast-resident cutthroat trout (*O. clarki*) and sockeye salmon (*O. nerka*), both of which are not considered threatened or endangered.

Bald eagle (*Haliaeetus leucocephalus*) is currently a federal Species of Concern and a sensitive species (priority species) in Washington. The project location is known to be (but not mapped as being) within the habitat of bald eagle and great blue heron (*Ardea herodias*), another priority species. While eagles and herons are occasionally sighted at the Facility, there are no known eagle or heron nests in the vicinity of the project location.

c. Is the site part of a migration route? If so, explain.

While Meadowbrook Pond is not part of a specific known migration route, Seattle is located within the migratory route of many bird species and is part of the Pacific Flyway, a major north-south route of travel for migratory birds in the Americas extending from Alaska to Patagonia. The project location is more than 3,000 feet west of Lake Washington, another important migration route for many animal species.

d. Proposed measures to preserve or enhance wildlife, if any:

Because the project involves in-water work, there could be temporary impacts to fish and other aquatic life. To avoid or minimize these impacts, the project would use approved

SOPs, BMPs, and conservation measures to determine and direct work in fish-bearing waters. For example, all equipment to be used for construction activity would be cleaned and inspected before it arrives at the project location to avoid and minimize the potential for fuel or lubricant leaks. As possible, construction equipment would use vegetable-based oils and lubricants. The project would also install native plants around the perimeters of the Pond and islands to improve fish and wildlife habitat. Native plants would be used to restore disturbed areas, where and when appropriate. Five floating habitat islands would also be deployed in the Pond to improve habitat for waterfowl and other animals.

Fish and other aquatic life could be injured or killed by the proposed dredging activity. Such injury or death of fish may be caused by crushing, stranding, turbidity, and/or elevated water temperatures. To avoid and minimize these impacts, the project would rely on fish removal from work areas and the relocation of those organisms to safe areas. The method for doing so is briefly described below.

All in-channel and Pond work would occur during the agency-approved in-water construction window (fish window), generally between July 1 and August 30. Work areas with fish would first be isolated with fish exclusion nets to prevent fish from entering those areas. After the nets are installed, fish would be carefully captured by qualified biologists using WDFW protocols for using capture nets and electro-fishing equipment. Those fish would be carefully removed from the work area and relocated to safe areas outside of the work area.

Forebay dredging using heavy equipment would occur once fish have been removed from that work area and relocated to elsewhere in the Pond (non-salmonids) or downstream areas of Thornton Creek (salmonids). The fish would first be removed using the methods described above. Once the fish were relocated, the work area would be isolated by installing sandbag berms upstream and downstream of the work area and using mechanical pumps to fully "pump and bypass" flows in the mainstem Thornton Creek around the work area. Those flows would be discharged back to the stream channel downstream of the work area through an energy dissipater to minimize turbidity as that water re-enters the streambed.

Sump pumps would be used to continuously dewater the work area as needed during the actual dredging work. That discharge water tends to be small in volume, but turbid. Thus, the discharge water would be directed to an upland location where it can soak into the soil without causing turbidity problems.

During the forebay dredging, soft soils would be protected with wooden pads, steel plates, or other measures to isolate the construction equipment from direct contact with those soils. After the forebay dredging is complete, the upstream berm would be breached to allow a small amount of water to re-enter the work area and suspend loose sediment. This initial water would then be pumped and discharged to a designated upland area. Once the discharge water cleared, both berms would be removed to allow unimpeded flows in the mainstem of Thornton Creek.

Up to 60 trees may be removed by the project. Removed trees may be replaced on a 2-for-1 basis, as may be required by former Mayor Greg Nickels' Executive Order 03-05

(2005; Clerk File #307611). If required, the trees would be located on the project parcel in areas to be determined. An increase in the number of trees together with the increase in the surface area of Meadowbrook Pond is expected to benefit wildlife species by increasing habitat diversity and availability.

Due to the known presence of New Zealand mud snail in the Thornton Creek watershed, precautions are needed to guard against inadvertent dispersal of the snail to other parts of the Thornton Creek watershed or to other watersheds. Such precautions would also function to protect against the introduction of other new invasive alien species to the Thornton Creek watershed. As a result, this project would implement Level 1 and Level 2 decontamination procedures of the most current WDFW Invasive Species Management Protocols (version 1; July 2011). That document is available from Allen Pleus, Aquatic Nuisance Species Coordinator for WDFW (360-902-2724; Allen.Pleus@dfw.wa.gov). Because New Zealand mud snails are known to survive out of water (in moist media) for many days, the estimated 9,700 cubic yards of dredged material anticipated to be exported from the site would be landfilled in a licensed landfill and not used for other purposes.

B6 Energy and Natural Resources

- a. **What kinds of energy (electric, natural gas, oil, wood stove, solar) would be used to meet the completed project's energy needs? Describe whether it would be used for heating, manufacturing, etc.**

The completed project would not require additional energy or natural resources beyond the continued use of existing electrical services for lighting and security measures. Maintenance and operations crew vehicles would continue to combust diesel fuel and gasoline.

- b. **Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.**

The proposed project does not involve building structures or planting vegetation that would block access to the sun for adjacent properties.

- c. **What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:**

There are no conservation features or proposed measures to reduce or control energy impacts because there would be no such impacts.

B7. Environmental Health

- a. **Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe:**

Materials likely to be present during construction would include gasoline and diesel fuels, hydraulic fluids, oils, lubricants, and other chemical products. A spill of one of these chemicals could potentially occur during construction as a result of equipment failure or worker error. A SWPPP would be prepared and implemented during construction.

King County's existing 42-inch wastewater mainline that runs under the Pond could be accidentally damaged and cause raw sewage to enter Thornton Creek. To prevent such spills, SPU would station a vacuum truck upstream of the job site to capture any incoming sewage and ensure the sewer line is empty while excavating or dredging near the sewer line. SPU sewer maintenance workers would inspect the job daily to detect evidence of spills. Emergency procedures and contact numbers would be contained in the SWPPP. Sediments found in the Facility are known to contain very low levels of pollutant contamination in dissolved, sorbed, precipitated, and chelated forms. Pollutants may include heavy metals (such as copper, lead, chromium, and zinc) and hydrocarbons (such as diesel, gasoline, and oils). Because levels of these contaminants are very low, the dredged sediment is neither regulated nor considered a hazard to workers, the public, or the environment.

The completed project would not result in greater environmental health hazards than already exist related to the operation, maintenance, and use of the Facility.

(1) Describe special emergency services that might be required.

Possible fire or medic services could be required during project construction, as well as possibly during operation and maintenance of the completed project. However, the completed project would not demand higher levels of special emergency services that already exist related to the operation, maintenance, and use of the Facility. Typical emergency services required for medical emergencies are provided by the Seattle Fire Department. Typical security services are provided by the Seattle Police Department and SPU.

(2) Proposed measures to reduce or control environmental health hazards, if any:

A SWPPP would be developed to control and manage spills during construction. Any soils contaminated by spills would be excavated and disposed of in a manner consistent with the level of contamination, in accordance with federal, state, and local regulatory requirements, by a qualified contractor(s) and/or City staff. During construction, SPU or its Contractor would use SOPS and BMPs, as identified in the City of Seattle's Stormwater Code SMC 22.800-22.808, Director's Rule: 2009-004 SPU/16-2009 DPD, and Volume 2 Construction Stormwater Control Technical Requirements Manual, to reduce or control environmental health hazards.

Equipment would be inspected for leaking hoses, mechanical joints, and hydraulic pistons. Temporary control measures for both erosion and hazardous material spills would be installed to minimize access pathways to Thornton Creek in the event of a spill or leak. Hazardous material spill response materials would be available on the construction site for the duration of the construction work.

As required by the Washington Department of Labor and Industries (WAC 296-843), a Health and Safety Plan would be prepared by SPU for SPU construction staff and SPU's contractor for its staff before work commences. The plan would address proper employee training, use of protective equipment, contingency planning, and secondary containment of hazardous material. It would identify measures to ensure construction worker safety, outline emergency medical procedures, and reporting requirements. Public access to the work areas would be restricted.

b. Noise

- (1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

Noises that exist in the area would not affect the project.

- (2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

Noise levels in the vicinity of construction would temporarily increase during construction activities, including the 24 hour use of a pump or pumps to conduct the pump-and-bypass for Thornton Creek and general dewatering of work areas as required. Short-term noise from construction equipment would be limited to the allowable maximum levels of City of Seattle's Noise Control Ordinance [Seattle Municipal Code (SMC) Chapter 25.08]. Per SMC 25.08, elevated noise from construction equipment would be allowed only between the hours of 7 am and 10 pm weekdays, and between 9 am and 10 pm on weekends and legal holidays. For this project, construction typically would take place between 7 am to 6 pm on weekdays, except for emergencies that may occur before or after those times. The completed project would not contribute noise beyond that which already exists related to the operation and maintenance of the Facility.

- (3) Proposed measures to reduce or control noise impacts, if any:

Construction equipment would be muffled in accordance with the applicable laws. SMC Chapter 25.08 (which prescribes limits to noise and construction activities) would be enforced while the project is being constructed and during operations, except for emergencies.

B8. Land and Shoreline Use

- a. What is the current use of the site and adjacent properties?

The Facility is a constructed stormwater management facility that also serves as open space, a community passive recreational area, and outdoor education space. The project location is surrounded by single-family residential properties to the north and west. Residential streets (39th Avenue Northeast and Northeast 105th Street) border the project location to the east and south. Pedestrians are able to access the site from all directions. However, there is no vehicle parking on the project location.

- b. Has the site been used for agriculture? If so, describe.

The site has not been used for agricultural purposes for at least 80 years.

- c. Describe any structures on the site.

The Facility contains a King County wastewater pump station and an information kiosk for pedestrians and visitors. There are also three concrete weirs that meter flow into and through the Pond, three pedestrian bridges for pedestrian and service access around the Facility, a 72 inch overflow pipe (and diversion structure) that discharges to Lake Washington, a Pond forebay diversion structure that diverts high flows in Thornton Creek

to the Pond, an overflow structure (maintenance hole) in the Pond, several art pieces (including mounded earth sculptures), and a King County 42 inch wastewater mainline. A site plan showing most of these structures is included as Attachment B.

d. Will any structures be demolished? If so, what?

The stairway, stairway platform, and pedestrian bridge at the forebay trash rack would be demolished.

Access improvements to the overflow pipe diversion structure would require that several "art rocks" be moved out of the construction zone. These art pieces would be relocated to other areas of the parcel in consultation with the artists who created the pieces. In addition, these access improvements would require that portions of some of the mounded earth sculptures be cut to accommodate widening of the pedestrian pathways. Cut portions of those earth sculptures would be faced with rockery walls to ensure mound stability and improve aesthetics.

e. What is the current zoning classification of the site?

The project parcel is currently zoned Single Family (7,200 square feet).

f. What is the current comprehensive plan designation of the site?

The current comprehensive plan designation of the project area is single family residential.

g. If applicable, what is the current shoreline master program designation of the site?

The project parcel has no Shorelines of the State that are regulated under the City of Seattle's Shoreline Master Program.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

The project or a portion of it is within a Wetland Area, a Riparian Corridor, Liquefaction-prone Area, a Flood-prone area, and Steep Slope Area—Environmentally Critical Areas (ECA), as mapped by the City of Seattle's DPD. Wetlands and riparian characteristics are described in Sections B.3.a and B.4.

The project location is situated in a former organic-soil based wetland and, more generally, a seismically active area and is prone to seismic hazards such as liquefaction, lateral spreading, and amplified seismic response. The project location lies approximately 7 miles north of the Seattle fault zone, a shallow crustal tectonic structure that is considered active (meaning it has the potential to cause earthquakes in the future) and is capable of producing earthquakes of magnitude 7.3 or greater. The recurrence interval of earthquakes on this fault zone is believed to be on the order of 1,000 years or more. The most recent large earthquake on this fault occurred about 1,100 years ago. There are also several other shallow crustal faults in the region (such as the Southern Whidbey Island fault zone) that are capable of producing strong ground shaking.

i. Approximately how many people would reside or work in the completed project?

No people would reside or work in the completed project.

j. Approximately how many people would the completed project displace?

No people would be displaced by the project.

k. Proposed measures to avoid or reduce displacement impacts, if any:

There are no mitigation measures proposed because there are no impacts related to displacement.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

The project is required to obtain a Master Use Permit from the City of Seattle DPD, which would ensure the proposed project is consistent with current land uses and plans.

B9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high, middle, or low-income housing.

The proposed project would not construct any housing units.

b. Approximately how many units, if any, would be eliminated? Indicate whether high, middle, or low-income housing.

The proposed project would not remove any housing units. The project would demolish three portable structures but these are not housing units and are currently vacant.

c. Proposed measures to reduce or control housing impacts, if any:

No measures are proposed because there would be no housing impacts.

B10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas? What is the principal exterior building material(s) proposed?

No buildings or structures are planned for the project.

b. What views in the immediate vicinity would be altered or obstructed?

The completed project would not affect views from surrounding streets and residences because those views of the Facility are screened by existing vegetation that would not be impacted by the proposed project. Because up to 60 existing trees may need to be removed, views of the Facility from within the Facility would be altered.

c. Proposed measures to reduce or control aesthetic impacts, if any:

The project would also install native plants around the perimeters of the Pond and islands to improve fish and wildlife habitat. Native plants would be used to restore disturbed areas, where and when appropriate. Trees that would be removed may be required to be

replaced on a 2-for-1 basis. The specific locations of any required replacement trees have not yet been determined.

Portions of some of the mounded earth sculptures would be cut to accommodate widening of the pedestrian pathway for service vehicle access to the overflow pipe diversion structure. Cut portions of those earth sculptures would be faced with rockery walls to ensure mound stability and improve aesthetics.

B11. Light and Glare

- a. What type of light or glare would the proposal produce? What time of day would it mainly occur?**

The completed project would not produce any light or glare. The expansion (new) lobe of the Pond is not expected to generate glare.

- b. Could light or glare from the finished project be a safety hazard or interfere with views?**

There would be no light or glare from the completed project.

- c. What existing off-site sources of light or glare may affect your proposal?**

There are no existing off-site sources of light and glare that would affect the proposal.

- d. Proposed measures to reduce or control light and glare impacts, if any:**

No mitigation is being proposed because there would be no adverse impacts related to light and glare.

B12. Recreation

- a. What designated and informal recreational opportunities are in the immediate vicinity?**

The Facility is used by the Meadowbrook community for passive recreational uses such as walking, jogging, non-motorized biking, and wildlife-watching. The Meadowbrook Community Center and Nathan Hale High School and its athletic fields are more than 400 feet west of the project location, on the west side of 35th Avenue Northeast.

- b. Would the proposed project displace any existing recreational uses? If so, describe.**

The proposed project would not permanently displace any existing recreational uses. During construction, some pedestrian and biking access to and through the Facility would be temporarily restricted or closed.

- c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any:**

Temporary closures or detours affecting pedestrian and biking routes/access would be required. The project would attempt to make those closures and detours as brief as possible. Some level of public access to the Facility would continue throughout the construction period.

B13. Historic and Cultural Preservation

- a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.**

The proposed project is located on fill materials in a former wetland area of the Thornton Creek watershed. There are no places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site. To determine if National Register or Washington Heritage properties are located in or adjacent to the project area, the project location was checked against the following registers on December 8, 2011.

- City of Seattle Landmarks

http://www.cityofseattle.net/neighborhoods/preservation/landmarks_listing.htm

- Washington Heritage Register and National Register of Historic Places

<http://www.dahp.wa.gov/historic-register> (general site on historic registers),

<http://www.dahp.wa.gov/washington-heritage-register> (a site specific to the Washington Heritage Register) and the WISAARD database

<http://www.dahp.wa.gov/learn-and-research/find-a-historic-place>

While the WISAARD database indicates numerous historic properties reports have been submitted for various structures near the project location, none of these registers recorded any places or objects formally listed on, or proposed for, national, state, or local preservation registers on or next to the project location. In addition, the cultural resources assessment for the Thornton Creek Confluence Project (NWAA 2011), conducted for both the Thornton Creek Confluence Project and the Meadowbrook Pond Detention Facility Dredging and Improvements Project, identified no such resources.

- b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.**

The cultural resources assessment for the Thornton Creek Confluence Project (NWAA 2011), conducted for both the Thornton Creek Confluence Project and the Meadowbrook Pond Detention Facility Dredging and Improvements Project, identified no such resources. Much of the site consists of previously disturbed land associated with the former Lake City Sewage Treatment Plant, improved street rights-of-way, and other disturbances. The project's location on fill materials and the site's disturbance history combine to reduce the project's likelihood of encountering undisturbed archaeological materials.

- c. Proposed measures to reduce or control impacts, if any:**

Due to the project's location on fill material and the site's disturbance history, the cultural resources assessment for the Thornton Creek Confluence Project (NWAA 2011), conducted for both the Thornton Creek Confluence Project and the Meadowbrook Pond Detention Facility Dredging and Improvements Project, did not recommend monitoring for archaeological resources during construction. However, should evidence of cultural artifacts or human remains, either historic or prehistoric, be encountered during excavation, work in that immediate area would be suspended and the find would be examined and documented by a professional archaeologist. Decisions regarding appropriate mitigation and further action would be made at that time.

B14. Transportation

- a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.**

Pedestrian access to the site is available from Northeast 105th Street and 35th, 36th, and 39th Avenues Northeast. Private vehicles are not allowed within the Facility; visitors typically park their vehicles on nearby public streets, including very informal parking at the street-end of 36th Avenue Northeast. Construction traffic for this project would access the site by means of three service roads on the project parcel: one accessed from the street-end at 36th Avenue Northeast; a second accessed from Northeast 105th Street; and a third accessed from 39th Avenue Northeast.

- b. Is the site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?**

The project location is currently served by nearby public transportation. Metro Transit routes 64 and 65 travel on 35th Avenue Northeast. The nearest transit stop is located on 35th Avenue Northeast at Northeast 105th Street, approximately 500 feet west of the Facility's south entrance.

- c. How many parking spaces would be unavailable during project construction? How many spaces would the completed project have? How many would the project eliminate?**

The project anticipates staging construction vehicles and equipment in the paved street-end of 36th Avenue Northeast and in an area in the northwest corner of the parcel. Up to 20 informal public parking spaces at the 36th Avenue Northeast street-end would be temporarily displaced by the project. There is no public parking available on the Facility itself. There is ample street parking on Northeast 105th Street and 39th Avenue Northeast, immediately adjoining the project parcel. None of that street parking would be permanently impacted by the project. However, the project anticipates that very brief, temporary street and parking closures on 39th Avenue Northeast would be required to mobilize/demobilize the dredging barge.

- d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).**

The proposed project would not require any new public roads, streets, or improvements.

- e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.**

The proposed project would not occur in the immediate vicinity of water, rail, or air transportation. Dredge spoils may be trucked to a railyard for transfer to railcars for transport to a landfill site.

- f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.**

Project construction would require approximately 2,417 total round-trips due to workers and materials being transported to and from the project location during the 80 work day construction period. Trips would occur between the hours of 7 am and 10 pm weekdays, and 9 am and 10 pm weekends and legal holidays. Specific timing of peak volumes is not

known. Crew transportation to and from the project site in pick-up trucks and vans is expected to generate approximately 15 round-trips per day or a total of 1,200 round-trips. Removal of dewatered dredged/excavated material is expected to generate an estimated 1,200 round-trips. Excavated spoils and dewatered dredged materials would be removed from the site using truck/pup combinations. Each truck/pup combination would contain about 25 tons or 18 cubic yards of dewatered dredged material. Up to 6 truck/pups would make as many as 5 round-trips per day, or up to 30 round-trips per day over 40 work days during the 80 work day period.

The completed project is not expected to generate more vehicle round-trips beyond the number of vehicle round-trips per year currently required to operate and maintain the Facility.

g. Proposed measures to reduce or control transportation impacts, if any:

There are no proposed measures to reduce or control transportation impacts because the proposed project would have only small-scale temporary impacts and no permanent impacts. Temporary closure of sidewalks, parking spaces traffic lanes, and the 36th Avenue street end would be controlled by the Street Use Permit issued by SDOT.

B15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

The proposed project would not create increased need for public services.

b. Proposed measures to reduce or control direct impacts on public services, if any.

No mitigation is being proposed because there would be no impacts on public services.

B16. Utilities

a. Check utilities available at the site, if any: [check the applicable boxes]

- | | | |
|--|--|--|
| <input type="checkbox"/> None | | |
| <input checked="" type="checkbox"/> Electricity | <input checked="" type="checkbox"/> Natural gas | <input checked="" type="checkbox"/> Water |
| <input type="checkbox"/> Telephone | <input checked="" type="checkbox"/> Sanitary sewer | <input checked="" type="checkbox"/> Refuse service |
| <input checked="" type="checkbox"/> Other: Fiber/Cable | | <input type="checkbox"/> Septic system |

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

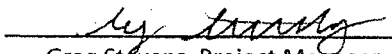
☒ None

This project would neither affect existing utilities nor construct new utilities. The completed project would not require additional amounts of electricity beyond that amount currently used by the existing Facility.

C. SIGNATURE

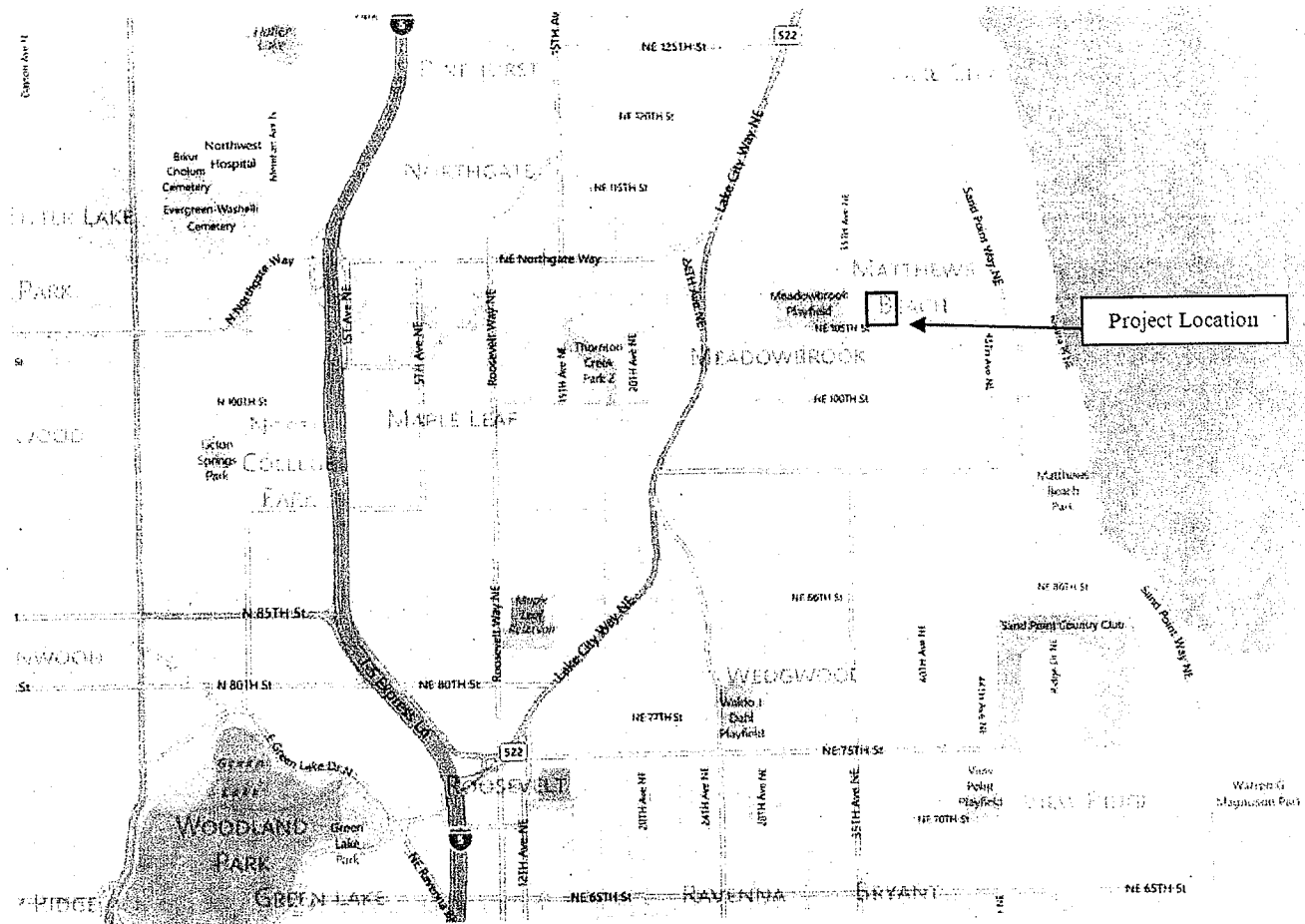
**Meadowbrook Pond Dredging and Improvements
SEPA Environmental Checklist**

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

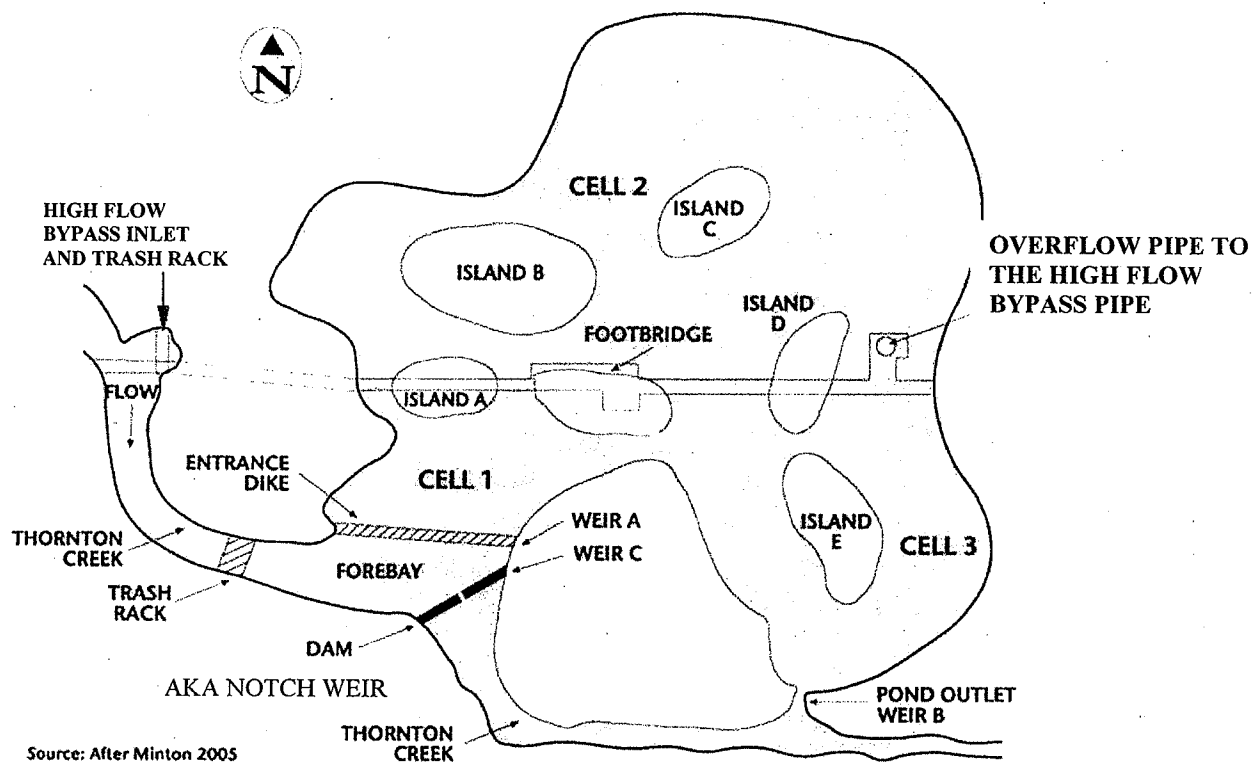
Signature: 
Greg Stevens, Project Manager

Date: 2/29/2012

Attachment A:
Vicinity Map

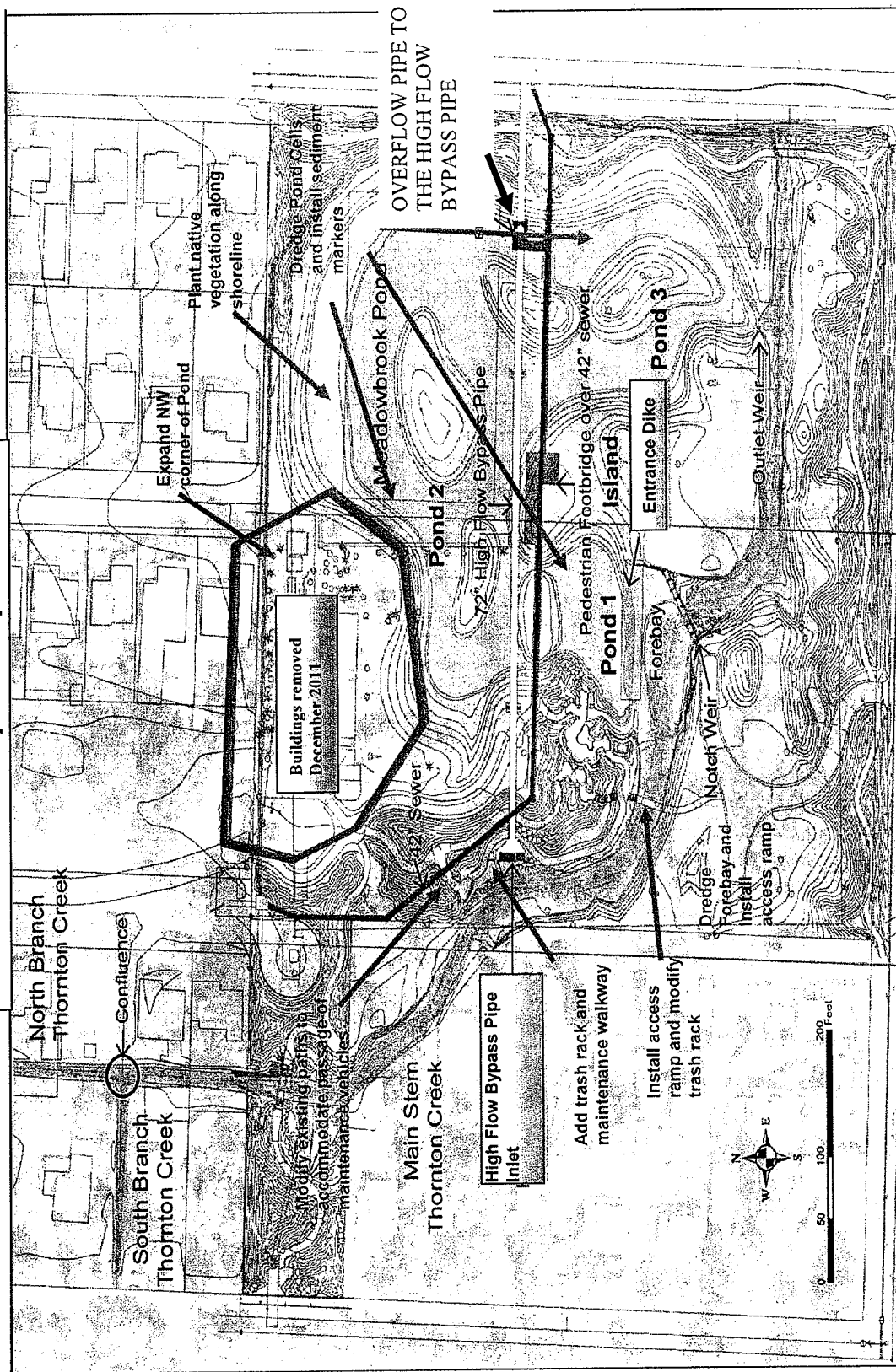


Attachment B:
General Layout of Existing Meadowbrook Pond Facility



Meadowbrook Pond General Layout

Attachment C: Proposed Improvements



Attachment D: Greenhouse Gas Emissions Worksheet

Section I: Buildings						
			Emissions Per Unit or Per Thousand Square Feet (MTCO ₂ e)			
Type (Residential) or Principal Activity (Commercial)	# Units	Square Feet	Embodied	Energy	Transportation	Lifespan Emissions (MTCO ₂ e)
Single-Family Home	0		98	672	792	0
Multi-Family Unit in Large Building	0		33	357	766	0
Multi-Family Unit in Small Building	0		54	681	766	0
Mobile Home	0		41	475	709	0
Education		0.0	39	646	361	0
Food Sales		0.0	39	1,541	282	0
Food Service		0.0	39	1,994	561	0
Health Care Inpatient		0.0	39	1,938	582	0
Health Care Outpatient		0.0	39	737	571	0
Lodging		0.0	39	777	117	0
Retail (Other than Mall)		0.0	39	577	247	0
Office		0.0	39	723	588	0
Public Assembly		0.0	39	733	150	0
Public Order and Safety		0.0	39	899	374	0
Religious Worship		0.0	39	339	129	0
Service		0.0	39	599	266	0
Warehouse and Storage		0.0	39	352	181	0
Other		0.0	39	1,278	257	0
Vacant		0.0	39	162	47	0
TOTAL Section I Buildings						0

Section II: Pavement						
						Emissions (MTCO ₂ e)
Concrete/curb (50 MTCO ₂ e/1,000 sq ft at 6 inches of thickness)		3,550 sq ft at 6 inches of thickness				178
TOTAL Section II Pavement						178

Section III: Construction	
(See detailed calculations below)	Emissions (MTCO ₂ e)
TOTAL Section III Construction	
366	

Section IV: Operation and Maintenance	
No change from existing	Emissions (MTCO ₂ e)
TOTAL Section IV Operations and Maintenance	
0	

TOTAL GREENHOUSE GAS (GHG) EMISSIONS FOR PROJECT (MTCO₂e)	544
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Meadowbrook Pond Dredging and Improvements
SEPA Environmental Checklist

Section III Construction Details

Construction: Diesel

Equipment	Diesel (gallons)	Assumptions
Concrete truck (1)	480	4 days x 6 hours/day x 20 gallons/hour (345 HP engine)
Excavator (1)	5,760	80 days x 8 hours/day x 9 gallons/hour
Backhoe (1)	640	20 days x 8 hours/day x 4 gallons/hour
Dump truck with pup (6)	3,600	40 days x 5 round-trips/day x 15-mile round-trip ÷ 5 mpg x 6 trucks
Flatbed truck (1)	28	7 days x 1 round/trip/day x 20 mile round trip ÷ 5 mpg
Dredge (IMS 5012 LP Versi-Dredge)	7,680	60 days x 8 hours/day x 16 gallons/hour
Subtotal Diesel Gallons	18,188	
GHG Emissions in lbs CO₂e	482,891	At 26.55 lbs CO ₂ e per gallon of diesel
GHG Emissions in metric tons CO₂e	219	1,000 lbs = 0.45359237 metric tons

Construction: Gasoline

Equipment	Gasoline (gallons)	Assumptions
Pick-up truck or crew vans (3)	1,800	80 days x 3 trucks x 5 round-trips/day x 15-mile round-trip ÷ 10 mpg
6 inch pump (for creek by-pass)	11,520	24 days x 24 hours/day x 20 gallons/day
Subtotal Gasoline Gallons	13,320	
GHG Emissions in lbs CO₂e	323,676	At 24.3 lbs CO ₂ e per gallon of gasoline
GHG Emissions in metric tons CO₂e	147	1,000 lbs = 0.45359237 metric tons

Construction Summary

Activity	CO ₂ e in pounds	CO ₂ e in metric tons
Diesel	508,379	219
Gasoline	323,676	147
Total for Construction	832,055	366

Section IV Long-Term Operation and Maintenance Details

Operation and Maintenance: Diesel

Equipment	Diesel (gallons)	Assumptions
Subtotal Diesel Gallons	0	
GHG Emissions in lbs CO₂e	0	At 26.55 lbs CO ₂ e per gallon of diesel
GHG Emissions in metric tons CO₂e	0	1,000 lbs = 0.45359237 metric tons

Operation and Maintenance: Gasoline

Equipment	Gasoline (gallons)	Assumptions
Subtotal Gasoline Gallons	0	
GHG Emissions in lbs CO₂e	0	At 24.3 lbs CO ₂ e per gallon of gasoline
GHG Emissions in metric tons CO₂e	0	1,000 lbs = 0.45359237 metric tons

Operation and Maintenance Summary

Activity	CO ₂ e in pounds	CO ₂ e in metric tons
Diesel	0	0
Gasoline	0	0
Total Operations and Maintenance	0	0

EXHIBIT B



City of Seattle
Seattle Public Utilities

Meadowbrook Pond Detention Facility Dredging and Improvements Project
SEPA Determination of Non-Significance (DNS)

Description of Proposal

Meadowbrook Pond is a constructed stormwater management facility that collects and detains a portion of the flows from Thornton Creek in order to reduce downstream flooding, streambed scouring, and sediment deposition in Lake Washington. This project would dredge accumulated sediment in all areas of Meadowbrook Pond (Pond) as it exists now, enlarge the Pond, improve trash removal at the inlet to the high flow bypass pipe, improve employee access and safety, and improve Pond habitat. The project would not alter any flow control features affecting Thornton Creek or the Pond, including the inlet to the high flow bypass pipe, the Pond entrance dike, the Pond outlet, or the Pond structure that overflows to the high flow bypass pipe.

Specific improvements would include:

- Dredge the Pond forebay to its original sediment storage design specifications;
- Construct two new service roads to the forebay to improve service vehicle access;
- Modify the existing forebay trash rack to improve employee safety by demolishing the existing stairway and concrete platform, installing a new service walkway, and installing a new concrete pedestal to create access to the new walkway;
- Dredge all three cells of the Pond to their original sediment storage design specifications;
- Expand the Pond volume by approximately 10 percent by excavating approximately 10,600 cubic yards from the northwest corner of the Facility, constructing a service road into this new lobe, and constructing a flood control berm (north berm) along the north perimeter of the Pond. The existing entrance kiosk and the dogwood trees comprising Annie's Memorial tree grove would be relocated to other locations on the project parcel;
- Install permanent sediment depth gages in all Pond cells;
- Improve habitat conditions in the Pond by planting native vegetation around the perimeters of the Pond and islands;
- Improve habitat conditions in the Pond by installing five floating habitat islands;
- Add a second trash rack at the inlet to the high flow bypass pipe, a new concrete slab and two walls to accommodate the new trash rack, a new service walkway, and a new service ladder;
- Modify pedestrian and service vehicle access to the existing bypass trash rack and inlet structure to improve worker safety by widening existing asphalt pathways to 15 feet wide and adding safety features such as railings at the bypass trash rack and inlet structure.

Proponent

Seattle Public Utilities
Seattle Municipal Tower Suite 4900
P.O. Box 34018
Seattle, WA 98124-4018

Ray Hoffman, Director
Seattle Public Utilities
700 5th Avenue, Suite 4900
PO Box 34018
Seattle, WA 98124-4018

Tel (206) 684-5851
Fax (206) 684-4631
TDD (206) 233-7241
ray.hoffman@seattle.gov

<http://www.seattle.gov/util>

An equal employment opportunity, affirmative action employer. Accommodations for people with disabilities provided on request.

Location of Proposal

The project would occur on a single tax parcel (#2726049129; 10.5 acres) owned by SPU. That parcel has several addresses, including 3600 Northeast 105th Street, 10700 36th Avenue Northeast, and 10515 39th Avenue Northeast. The project parcel is located in the heavily developed, residential Meadowbrook neighborhood of northeast Seattle. The project is located in the southwest quarter of Section 27, Township 26 North, Range 4 East and within the Lake Washington Water Resource Inventory Area (WRIA 8). The GPS location is 47.421952 / 122.171634.

Lead Agency

Seattle Public Utilities, the lead agency for this proposal, has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

This Determination of Non-significance (DNS) is issued under WAC 197-11-340(2); the lead agency will not act on this proposal for fourteen (14) days from the date below.

A copy of the environmental checklist is available at:

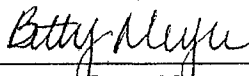
- Seattle Public Utilities, Director's Office Main Reception Area, Seattle Municipal Tower, Suite 4900, 700 Fifth Avenue, Seattle, Washington
- Seattle Central Library, General Reference Section
- Online at www.seattle.gov/util/Meadowbrook

Public and Agency Comments

Comments must be submitted by March 22, 2012 and must be sent to:

Betty Meyer, SEPA Responsible Official
Seattle Public Utilities
Seattle Municipal Tower, Suite 4900
P.O. Box 34018
Seattle, WA 98124-4018
206 386-1999
betty.meyer@seattle.gov

Signature: _____


Betty Meyer

Issue Date: March 8, 2012

Appeals

Appeals of this DNS must be filed by 5:00 p.m. on March 29, 2012. The appeal must be in writing, accompanied by a \$50.00 filing fee in a check made payable to the City of Seattle, and sent to:

City of Seattle Hearing Examiner
700 5th Avenue Suite 4000
P.O. Box 94729
Seattle, WA 98124-4729

You should be prepared to make specific factual objections. Contact the Hearing Examiner at 206-684-0521 to ask about or to make arrangements to read the procedures for SEPA appeals.

EXHIBIT C



City of Seattle

Office of Hearing Examiner

Sue A. Tanner, Hearing Examiner

Anne Watanabe, Deputy Hearing Examiner

April 3, 2012

Bruce Struthers
10514 Riviera Place NE
Seattle WA 98125

Re: Untimely Appeal

Dear Mr. Struthers:

The Seattle Municipal Code (SMC) at 25.05.680, provides that a decision may be appealed "*no later than five (5:00) p.m. the fifteenth day following...publication of the decision.*"

The City's Hearing Examiner has jurisdiction to hear appeals only if they are filed properly and timely within the Code-mandated appeal period. The last day of the appeal period was March 29, 2012. Although your appeal was submitted on March 29, 2012, the appeal fee was not received until March 30, 2012. Because the appeal fee was not timely, the appeal must be rejected. I have enclosed your appeal letter and the \$50.00 appeal fee that you submitted.

Sincerely,

Sue A. Tanner
Hearing Examiner

Cc: Betty Meyer, Seattle Public Utilities

EXHIBIT D



City of Seattle
Seattle Public Utilities

Date: April 2, 2012
To: Project File: Meadowbrook Pond Detention Facility Dredging and Improvements Project
From: Greg Stevens, Project Manager
Subject: Exemption from City of Seattle Environmentally Critical Areas Provisions (SMC Chapter 25.09)
cc: Trish Rhay, Director
Drainage & Waste Water Systems Management Division, Utility Systems Management Branch

PROJECT SUMMARY

The Meadowbrook Pond Stormwater Facility (Facility) is a 10.5 acre constructed stormwater management facility in northeast Seattle, located immediately downstream of the confluence of the north and south branches of Thornton Creek. It contains a 2.0 to 2.5 acre (depending on water levels) detention pond that captures some of the stormwater runoff from about 6,840 acres of the upstream watershed—nearly 90 percent of the total drainage area of Thornton Creek. The Facility was fully reconstructed during 1996-1997 from its prior condition as the abandoned Lake City Sewage Treatment Plant. A vicinity map is included as Attachment A. Attachment B depicts the general layout of the existing Facility. The project includes the following elements:

Forebay and Forebay Trash Rack

- Dredge the forebay to its original sediment storage design specifications (thereby dredging an estimated 2,000 cubic yards from the forebay);
- Construct two new service roads to the forebay by excavating 600 cubic yards to improve service vehicle access;
- Modify the existing trash rack to improve employee safety by demolishing the existing stairway and concrete platform, installing a new service walkway, and installing a new concrete pedestal to create access to the new walkway.

Meadowbrook Pond

- Dredge all three cells of the pond to their original sediment storage design specifications (thereby dredging an estimated 7,700 cubic yards from the pond);
- Expand the pond volume by approximately 10 percent by excavating approximately 10,000 cubic yards from the northwest corner of the Facility, constructing a service road into this new lobe, and

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<http://www.seattle.gov/util>

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constructing a flood control berm (north berm) along the north perimeter of the pond. The existing entrance kiosk and the dogwood trees comprising Annie's Memorial tree grove would be relocated to other locations on the project parcel;

- Install permanent sediment depth gages in all pond cells;
- Improve habitat conditions in the pond by planting native vegetation around the perimeters of the pond and islands;
- Improve habitat conditions in the pond by installing five floating habitat islands.

High Flow Bypass and Inlet Structure Trash Rack

- Add a second trash rack, a new concrete slab and two walls to accommodate the new trash rack, a new service walkway, and a new service ladder. This new trash rack will contain safety railings and a walkway to better allow workers to safely remove debris from the Creek that gets caught up in this area.
- Modify pedestrian and service vehicle access to the existing bypass trash rack and inlet structure to improve worker safety by widening existing asphalt pathways to 15 feet wide and adding safety features such as railings at the bypass trash rack and inlet structure.

The project would occur on a single tax parcel (#2726049129; 10.5 acres) owned by Seattle Public Utilities (SPU). That parcel has several addresses, including 3600 Northeast 105th Street, 10700 36th Avenue Northeast, and 10515 39th Avenue Northeast. The Facility is located in the heavily developed, residential Meadowbrook neighborhood of northeast Seattle. The project is located in the southwest quarter of Section 27, Township 26 North, Range 4 East and within the Lake Washington Water Resource Inventory Area (WRIA 8). The GPS location is 47.421952 / 122.171634.

ENVIRONMENTALLY CRITICAL AREAS

The project is located on a parcel known to have the following Environmentally Critical Areas (ECAs), as mapped by the City of Seattle's Department of Planning and Development: Riparian Corridor; Flood-prone Area; Liquefaction-prone Area; Steep Slope Area (greater than 40 percent slope); and Wetland Area. The first two ECAs are associated with Thornton Creek, which flows through the parcel. Portions of the parcel are presumed to be situated on fill material in a former organic-soil based wetland associated with the mainstem of Thornton Creek. Generally, filled wetland areas are considered to be seismically active areas prone to seismic hazards such as liquefaction, lateral spreading, and amplified seismic response.

The steep slopes identified on the parcel are not natural slopes, but are earthforms and rockeries along portions of the banks of Thornton Creek that were created through previous legal grading activity. The wetland identified on the parcel is the pond itself, which is considered a created stormwater facility. For purposes of ECA regulation, Seattle Municipal Code (SMC) Section 25.09.020 specifically excludes such artificial wetlands intentionally created from non-wetland sites, including, but not limited to, detention facilities and wastewater treatment facilities. Most of the existing pond was created for the previous Sewage Treatment Plant and is lined with concrete.

DETERMINATION

SPU has determined the proposed project is exempt from the City of Seattle's ECA provisions as per SMC 25.09.017 and 25.09.045.H.3.e [public or private projects designed to enhance riparian corridors, shoreline habitat and its buffer, and wetlands and their buffers, including stormwater-related functions,

that require either a Hydraulic Project Approval (HPA) from the Washington Department of Fish and Wildlife or a Section 404 permit under the federal Clean Water Act from the United States Army Corps of Engineers (Corps)]. This project meets the exemption criteria of SMC 25.09.045.H.3.e because the proposed activity meets these criteria established at SMC 25.09.045.H.1:

- a. The work is not a prerequisite to other development;
- b. No practicable alternative to the work with less impact on the ECA or buffer exists; and
- c. The work does not pose an unreasonable threat to the public health, safety, or welfare on or off the parcel.

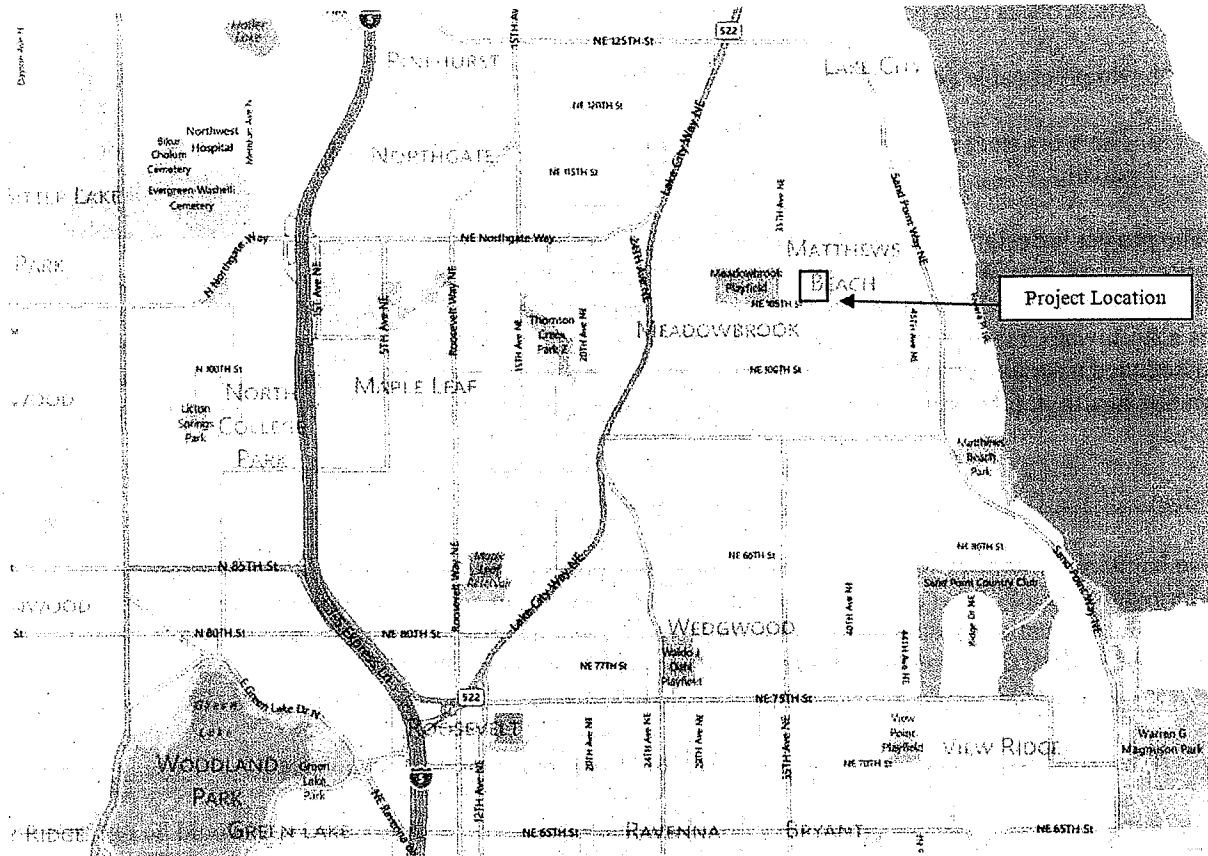
The project is designed to enhance riparian corridor and pond habitat and is required to obtain both an HPA and a Clean Water Act Section 404 permit. The work is indeed not requisite to other development. There is no practicable alternative to the work with less impact to the ECAs or their buffers because this is a stormwater management project that is required to be located along Thornton Creek and within the associated riparian corridor and flood-prone areas. Finally, the work is intended to reduce threats to public health, safety, and welfare by alleviating flooding in the vicinity of the Facility and downstream areas.

MEASURES TO AVOID AND MINIMIZE IMPACT TO ECAs

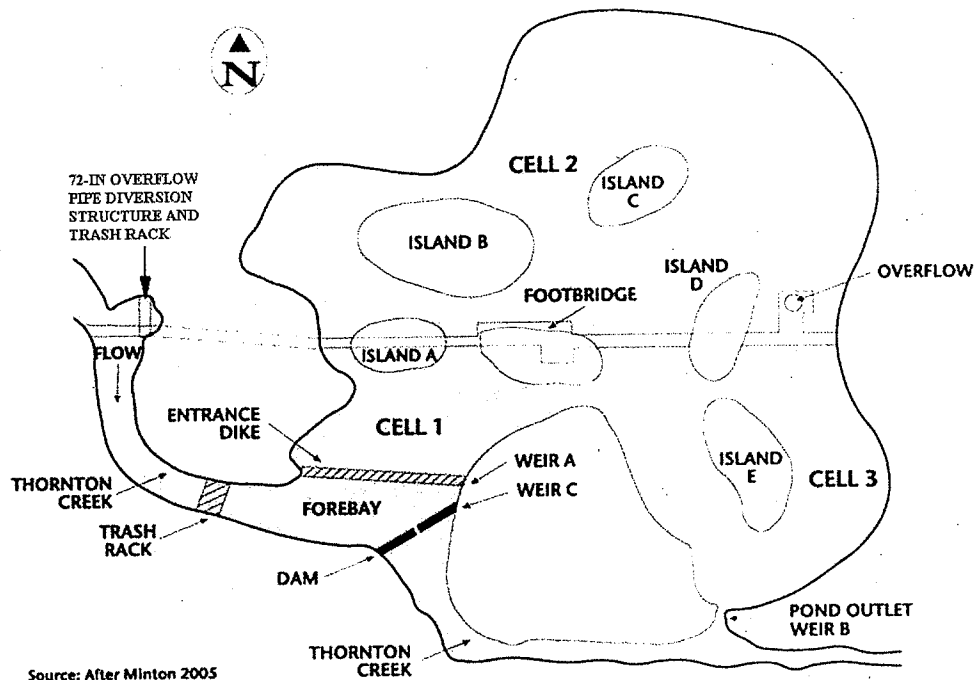
No habitable structures would be constructed by this project. Also, the project involves a constructed stormwater facility that cannot avoid being located in a riparian corridor or flood-prone area. In addition, the following actions would be implemented to minimize disturbance to the ECAs and their buffers to meet the general development standards for Riparian Corridors (SMC 25.09.200); Liquefaction-prone Areas (SMC 25.09.100); Flood-prone Areas (SMC 25.09.120); and Steep Slope Areas (SMC 25.09.180):

- The natural channel and floodway of Thornton Creek would remain unchanged.
- Impacts to some created steep slopes would include temporary disturbances that would be repaired to conditions as good as or better than existing conditions.
- Impacts to the affected ECAs and their buffers have been minimized by limiting plant removal and pruning, grading, and other disturbances to the absolute minimum required for project construction.
- Construction would proceed as rapidly as is safe and feasible to minimize the amount of time work is conducted in the affected ECAs and their buffers. The project is relatively small in scope and is expected to require no more than 80 workdays.
- SPU would implement temporary erosion and sedimentation control measures to manage potential erosion/sedimentation during construction, and to manage potential storm flows during construction.
- SPU would monitor project construction to ensure all standard operating procedures and best management practices are being implemented correctly and that erosion and sedimentation are effectively controlled.
- The project would restore all disturbed grades to match adjacent existing grades. All disturbed ground would be restored to turf or native plantings with mulch according to a revegetation plan that augments existing vegetation with native vegetation to an extent commensurate with project impacts.

Attachment A **Vicinity Map of Project Location**



Attachment B
General Layout of Existing Meadowbrook Pond Facility



Meadowbrook Pond General Layout